

CLIMATE PROTECTION MEASURES

Implementation Progress Report

August 2009

SUMMARY

On July 10, 2008 the City Council adopted implementation plans for seven additional climate protection measures to reduce Chula Vista's greenhouse gas or "carbon" emissions. The new measures, which were recommended by the City's Climate Change Working Group comprised of residents, businesses and community representatives, were designed to assist the City in meeting its 2012 emissions reduction commitment of 20% below 1990 levels by requiring "clean" vehicle replacements for City and contracted fleet services, linking energy assessments to annual business licenses, mandating green building standards for all new construction, facilitating turf lawn conversions to water-saving landscapes, focusing mixeduse, transit—oriented development near trolley stations, and implementing a community energy efficiency and solar retrofit program.

As directed by City Council, staff has been implementing the approved measures over the last 12 months based on available funding. The following 12-month progress report outlines each measure's implementation status and upcoming milestones. Most measures are making progress or meeting the milestones outlined in their original implementation plans. However, staff is proposing to transition the no-cost business energy assessment program (Measure #3) into a mandatory component of the business licensing process due to low voluntary participation levels. At Council's direction, staff will work with stakeholders to develop the necessary ordinance language and return to City Council for further review and consideration.

The City has been very successful in securing additional financing to fund some of the measures' short-term program implementation and some capital improvement projects outlined in the original plans. However, neither of the two long-term funding options approved by Council has been secured, but staff continues to work with the Climate and Energy Sub-committees and other stakeholders to pursue them.

OVERALL PROGRAM ADMINISTRATION

Stakeholder Outreach

Staff continues to educate residents, businesses, and community groups about the City's multi-department climate protection program. Program information has been distributed to the public through the Chula Vista CLEAN website, local newspaper advertisements, community-wide events such as the weekly farmers markets (Third Avenue and Otay Ranch Town Center), and Earth Month activities. In addition, the City hosted a special community presentation on April 22nd as part of the *National Conversation on Climate Action* organized by ICLEI-Local Governments for Sustainability and the National League of Cities. The event attracted over 60 participants and featured a presentation by the San Diego

Foundation on their "Focus 2050 Study" which evaluated the potential impact of climate change in the San Diego region and how local communities could "adapt."

The City is also engaging other local agencies in the implementation of its new climate measures and overall climate protection program. Staff attended the first multijurisdictional meeting in San Diego County of the California Statewide Community Development Authority (sponsored by the League of California Cities and the California Association of Counties) and pledged the City's support to establish a regional "California FIRST" bond program to assist local jurisdictions with implementing property-secured home energy retrofit financing or AB811-type programs. Chula Vista is also currently serving as the host city for the San Diego Regional Climate Protection Initiative. The new initiative, which is being sponsored by the San Diego Foundation and administered by ICLEI, has allowed the City to disseminate program information and coordinate carbon reduction efforts with other jurisdictions and regional stakeholders.

The City was a sponsored guest at an international conference in Sevilla, Spain convened by the Andalusian government in May. The conference was dedicated to facilitating the sharing of technical and policy resources concerning climate adaptation between public agencies within California and Andalusia. Staff will be working over the next month with the Council's ICLEI representatives, Councilmember Bensoussan and Councilmember Ramirez, to create a roadmap for further coordinating with these partner agencies and developing climate adaptation plans and programs. The City was also a sponsored guest speaker at the ICLEI Cities for Climate Action campaign's conference in Washington, DC which featured California Senators and Congressional representatives who are supportive of federal climate action initiatives.

As a result of these efforts, the City has been recognized by various stakeholder groups and agencies for its recent accomplishments in climate action planning and programs. Recently, the City of Chula Vista was selected as an award honoree by the California Flex Your Power Campaign for its energy efficiency efforts in the community and at municipal facilities. The City was also bestowed the inaugural "Cool City Award" by the Sierra Club (San Diego Chapter). The award was presented at the Sierra Club's annual benefit dinner in May and accepted on behalf of the City by Mayor Cox and Councilmember Bensoussan.

Emissions Tracking & Reporting

The City is currently compiling its 2008 greenhouse gas (GHG) emissions inventory for municipal operations and the broader community. For its 2008 inventory, Chula Vista will be continuing its climate action leadership tradition by participating in the California Climate Action Registry (CCAR). CCAR provides a higher level of scientific rigor and requires third-party verification as part of its inventory process. The 2008 GHG inventory will allow the City to assess its progress in reducing emissions to meet its 20% below 1990 levels target. The City's last inventory in 2005 documented an increase in citywide emissions compared to 1990 mainly due to residential sector growth. However, the City did make significant progress in reducing annual per capita emissions by 17% between the two inventory years and avoiding nearly 200,000 tons of GHG emissions annually. In addition, GHG emissions from municipal sources decreased by at least 18% mainly due to energy-efficient traffic signal retrofits. Staff plans to return to City Council in October 2009 with a completed 2008 emissions inventory.

MEASURE #1 – CLEAN VEHICLE REPLACEMENT POLICY FOR CITY FLEET

Overview

Measure #1 directs the City to require that 100% of the replacement vehicles purchased for the municipal fleet be high efficiency (hybrid) or alternative fuel vehicles (AFVs). However, factors such as the appropriateness for the vehicle task, fueling infrastructure, petroleum displacement, and the overall cost and environmental benefit must be considered prior to purchasing each replacement vehicle.

Status

The City recently added another electric-hybrid vehicle (wastewater truck) to its fleet inventory increasing the total number of non-transit hybrid/AFVs to 14. Due to budget constraints, the City will not be purchasing any new vehicles out of the Fleet Management Fund in Fiscal Year 2009-10. However, existing diesel-fueled vehicles in the City fleet will be converted to operate on biodiesel.

Next Steps

The conversion of the fleet's 128 diesel-fueled vehicles (or 23% of the total fleet) to biodiesel is anticipated to be implemented by November 2009 in conjunction with the installation of a 10,000 gallon fuel storage tank at the Public Works Corp Yard. The new tank will be fully funded through the City's federal Energy Efficiency & Conservation Block Grants (EECBG).

MEASURE #2 – CLEAN VEHICLE REPLACEMENT FOR CITY-CONTRACTED FLEETS

Overview

Measure #2 directs staff to work with fleets under City authority to influence their expanded use of alternative fuels and high efficiency/alternative fuel vehicles (AFV) including electric, biodiesel, ethanol, hybrid, hydrogen, and compressed natural gas (CNG) based on appropriateness for vehicle task, fueling infrastructure, petroleum displacement, overall cost, and environmental benefit.

Status

Chula Vista Transit

On January 15, 2009, Metropolitan Transit System approved Chula Vista Transit's request for two (2) additional 40-foot CNG buses. These buses will replace two (2) existing 1995 diesel buses and would increase the transit fleet's AFV count to 100%.

Street Sweeping

The current contract with Cannon-Pacific expires June 30, 2011. Language will be added to the Request for Proposals outlining the City's new policy for AFV/Hybrid vehicles.

Trash Hauler

Allied Waste Services (AWS) re-instituted the use of biodiesel for over 50 diesel-fueled vehicles in its Chula Vista fleet. On June 22, 2009, AWS started the use of biodiesel by taking delivery of 7,500 gallons of B20 biodiesel blend. The biodiesel fuel is locally

produced by New Leaf Biofuel which collects and recycles used cooking oil from Chula Vista (26 accounts) and San Diego restaurants.

Tow Trucks

The contract with the tow companies to provide police initiated tows expires June 30, 2011. Language will be added to the Request for Proposals outlining the City's new policy for AFV/Hybrid vehicles.

Next Steps

Two (2) 40-foot CNG transit buses have been ordered and are anticipated to arrive in November 2009. The City may work with utilities and regional agencies to further develop local infrastructure for alternative fuels helping to ensure that these fueling options are readily available for contractors and the public, whenever possible.

MEASURE #3 – BUSINESS ENERGY ASSESSMENTS

Overview

The measure, as adopted by City Council, would encourage commercial and industrial businesses to participate in an energy assessment of their premises through a new municipal ordinance. The measure helps businesses identify energy efficiency and water conservation opportunities at their facilities and take advantage of rebate, incentive and financing programs for improvements solely at the business's discretion. The assessments, which are being offered at no cost, only apply to businesses with a physical storefront and/or office and would be encouraged when a new license is issued or every three years for a renewed business license. The original Climate Change Working Group's recommendation for a mandatory assessment program aligned with the business license renewal process was amended by City Council into a voluntary program due to the program's historical high participation rate of 25% (or 1 of every 4 businesses agreeing to participate in the voluntary program). City Council passed the voluntary approach with the qualification that staff would update Council with the new voluntary participation rate through the business license renewal process after 6 months.

Status

In October 2008, City Council passed a new ordinance encouraging no-cost, voluntary energy assessments for commercial and industrial businesses. The energy assessments, which typically include an on-site review of a building's systems (i.e. lighting, cooling and heating), envelope (i.e. exterior windows, doors and insulation), office equipment, appliances, operational procedures, and energy bills, will assist the businesses in lowering their monthly utility costs and consequently their contribution to greenhouse gas emissions and climate change impacts. The assessments also include a review of water conservation, alternative transportation, and other practices which the participating business could implement and/or promote to its employees and customers. Since January, over 311 free energy assessments have been completed in the community. A survey of participating businesses highlighted that 71% had implemented at least one of the operational or retrofit recommendations provided by program staff and 29% have already noticed cost savings on their utility bills. Furthermore, because energy rates increased between 3-5% over the last

year, the energy savings from the recommendations will help offset these increased monthly utility costs.

City staff has tried multiple marketing and outreach methods over the last 6 months to increase program participation by local businesses. The voluntary energy assessment program was initially integrated into the City's business licensing process through updates to license application, renewal forms, website, and Permits Plus tracking software. Approximately 4,100 businesses which qualify for the free assessment (i.e. occupies a storefront or office) also received a program flyer with their business license application or renewal form in December 2008. Of these businesses, only 29 responded and participated as a result of voluntarily linking the energy assessments to the business license (an approximately 0.7% "success" rate). The majority of program participants (282 of 311) were actually recruited through on-site staff solicitations or cold calls. Although this method produced a 65% "success" rate, it requires additional staff time, travel, and other resources resulting in an approximately 25-35% increase in program implementation costs. It should be noted that staff expects this success rate to decrease dramatically as the program begins to focus on more hard-to-reach business sectors such as office buildings and large companies.

Because of the low success rate through linking voluntary assessments to business license renewals, staff recommends that City Council reconsider establishing the assessment program as a mandatory component of the business licensing process, as originally proposed by the Climate Change Working Group and as unanimously endorsed recently by the Resource Conservation Commission. The program, which would only mandate assessments (i.e. diagnostics) of a business's energy and water use, would <u>not</u> require any implementation of identified energy/water-saving opportunities and would <u>not</u> trigger any costs to the business. Although staff has been able to increase program participation through additional marketing methods, the added costs and time are not sustainable over the long-term. In addition, businesses would financially benefit from the information and data provided by the no-cost assessment helping them take advantage of free utility-sponsored services and reduce their monthly operating costs during these challenging economic times. The recommended mandatory program will ensure that every Chula Vista business has the opportunity to access their fair share of these ratepayer-funded opportunities making their business more regionally competitive.

Next Steps

Staff will continue to monitor and report to City Council the program's participation levels over the next year. In addition to the existing marketing channels, the business energy assessment program will be developing new outreach opportunities. The City will be working with two new SDG&E programs, the Mobile Energy Clinic and the Healthcare Energy Efficiency Campaign, to link the energy assessments to no-cost direct installation services. The services will provide participating businesses with free air-conditioning maintenance and energy efficiency retrofits helping to lower their monthly utility costs.

If directed by City Council, staff will work with the Chula Vista Chamber of Commerce and related stakeholders to return to Council in October to more formally consider the transition to a mandatory, free assessment program for the 2010 business license period.

MEASURE #4 – GREEN BUILDING STANDARD

Overview

As reported to Council in the 6-Month Progress Report in February 2009, Measure #4 would mandate new and retrofit residential and non-residential projects to incorporate the requirements of the Housing and Community Development's (HCD) version of the California Green Building Standards Code (CGBSC) and to be more energy efficient than the 2008 Building Energy Efficiency Standards (08 Standards) by a specific percentage. In addition, staff reported that they are considering a community/site design carbon savings option by which builders can use carbon savings realized from implementing sustainable community or site design measures toward meeting a portion of the required increased building energy efficiency standards. Two other components of Measure #4 are 1) the implementation of a green awareness program, and 2) updating existing and establishing new design and regulatory provisions that incorporate sustainable practices.

Staff is working on two draft ordinances, a green building ordinance (GBO) and an ordinance amending the City's Energy Code, Municipal Code Chapter 15.26, adopting the 08 Standards and the City's increased energy efficiency standards. The status of these ordinances and the other components is discussed below.

Status

Green Building Standards

Staff incorporated the CGBSC indoor water conservation measures into the City's proposed green building standards. Staff presented the proposed GBO to the Board of Appeals and Advisors (BOA&A) on August 10, 2009. The BOA&A passed a motion to recommend to City Council the adoption of the ordinance. Staff anticipates taking the GBO to Council in September 2009.

Increased Energy Efficiency Standards

The State moved the effective date of the 08 Standards to January 1, 2010. The 2008 Standards were scheduled to take effect on August 1, 2009; however, the California Energy Commission (CEC) experienced delays in completing a public domain compliance software which must be made available to the public prior to the 08 Standards taking effect. This moves the date by which our proposed increased energy efficiency standards can take effect to January 1, 2010 or after.

On May 6, 2009, staff presented the cost-effectiveness study and staff recommendation to the Council Energy Subcommittee. The study consisted of case studies analyzing the upfront incremental cost and payback periods resulting from requiring low-rise residential projects to be more energy efficient than the 08 Standards by 10%, 15%, and 20%, and non-residential and high-rise residential by 10%. At that time, staff proposed requiring low-rise residential (three stories or less) to be 15% more energy efficient than the 08 Standards, and 10% for high-rise residential and non-residential. The Sub-committee requested that staff return with additional information on the impact of 15% and 20% above 08 Standards for non-residential and high-rise residential before it can make its recommendations. Staff worked with SDG&E on amending their contract with the consultant to include case studies analyzing non-residential and high-rise residential for 15% and 20% above the 2008

Standards. Staff returned to the Subcommittee on August 3rd and presented the updated study and proposed 15% above the 08 Standards for both residential and non-residential, and proposed exempting low-rise residential additions and alterations that are less than or equal to 1,000 square feet and high-rise residential and non-residential additions and alterations that are less than or equal to 10,000 square feet. In addition, staff proposed including a placeholder in the ordinance for a future community design energy credit option. The Subcommittee modified staff's proposal with a recommendation to require 20% above the 08 Standards for low-rise residential in Climate Zone 10, the harsher climate zone covering the most easterly part of the City. Furthermore, the Subcommittee directed staff to provide statistical data on the median size of residential additions in the City to help identify if the 1,000 square foot threshold for residential addition/alteration is a reasonable size. Staff will incorporate the Subcommittee's recommendations into the proposed ordinance and will then take it to the BOA&A before taking it to Council. Staff anticipates bringing the proposed ordinance to Council in October 2009.

Green Awareness Program

Development Services staff is maintaining the "Sustainability Center" website and is assisting customers at the "Sustainability Desk." Future ordinances, policies, and guidelines resulting from the implementation of Measure #4 will be published on the site. Furthermore, staff is currently being trained on the proposed green building standards and the upcoming 08 Standards.

Policy Guidelines and Regulatory Amendments

This portion of the measure consists of the following three components related to updating existing and establishing new design and regulatory provisions to ensure incorporation of sustainable practices and features into new larger-scale development projects: the Community Sustainability Program, Zoning and Design Guidelines, and the current and proposed efforts of the Chula Vista Research Project (CVRP) through the National Energy Center for Sustainable Communities (NECSC) and San Diego State University (SDSU) regarding a Community Site Design Program.

Community Sustainability Programs –

Staff is near completion of updates to the Guidelines for preparation of Air Quality Improvement Programs (AQIP) required of new development projects involving more than 50 dwelling units. Present AQIP requirements from 2001 are out-of-date, and the update will reflect our current minimum energy savings requirements for new development as discussed above, as well as available programs and options for compliance that address vehicle miles traveled (VMT), transit-oriented design, multimodal streets, pedestrian orientation, and landscape design. Using current fiscal year funding, staff is also working with Criterion Planners/Engineers, Inc. to update the INDEX computer model used to evaluate the design of SPA Plans through the required The work will establish an expanded set of performance indicators for evaluating future development, along with new baseline performance scores that must be met for each of the indicators. Those baseline scores will be developed through analysis of smart growth oriented projects built in the last 10 years or so, including Otay Ranch Villages 1, 5, 6, and 11. The revised performance indicators and baseline scores will be included in the updated AQIP guidelines. The work with Criterion will be completed in September, and staff will then forward revised AQIP Guidelines for Council consideration in October 2009. The intent is to ensure that contemporary AQIP Guidelines are in place prior to processing the next series of SPA Plans in eastern Chula Vista as part of the South Otay Ranch/University Villages planning efforts.

Zoning and Design Guidelines-

As noted in the implementation plan, development of zoning standards and design guidelines for energy efficient communities is awaiting an analysis of findings from the CVRP conducted by the NECSC and SDSU. Staff and SDG&E are currently reviewing a revised version of the draft CVRP findings released in July 2009, and a final document should be available in September 2009. Staff will need approximately 90 days to review and assemble initial zoning and design policy guides for review and further direction by City Council. Staff currently anticipates returning to Council in November 2009 with these initial draft policy guides.

CVRP/NECSC Community Site Design Program-

As noted in prior reports, the CVRP centers around the evaluation of more energy efficient community design and building options using the Eastern Urban Center and Otay Ranch Village 9 as pilot models. The initiative modeled the energy efficiency and emissions performance of alternative building energy technologies and site design features for the two projects. Although the CVRP was not specifically designed to generate low-carbon site development standards and guidelines, the above noted modeling results do provide a firm foundation upon which to frame follow-up research to produce them.

To pursue this follow-up research, in fall 2009 staff worked collaboratively with the NECSC and two eastern Chula Vista developers in preparation and submittal of a competitive grant application to the CEC. While that application narrowly missed funding in January 2009, the NECSC and SDSU resubmitted a similar application in April 2009 (entitled Model Site Design Guidelines, Measures & Standards for Energy Efficient/Low Carbon Community Development) under the CEC's Technology Innovations for Buildings and Communities-II grant program. Similar to the earlier grant effort, the proposal includes a second tier of building and infrastructure technology modeling and community design option evaluations in conjunction with the pending South Otay Ranch/University Villages project work. It also includes formulation of low-carbon site development standard and guidelines envisioned by CCWG Measure #4.

On July 25, 2009, the NECSC was informed that the proposal passed the 1st stage screening. More detailed budget and contract specifics are now under preparation and review for the 2nd stage, and final notice of award by the CEC will take place in early December. If awarded, the work would commence in March 2010. The work associated with community design options and standards is scheduled over approximately 5 months, with initial information being available in September 2010. The information could then be used in developing workable modeling tools and design features for inclusion in a local Community Site Design Program

Next Steps

Staff anticipates taking the GBO to Council in September 2009 and the increased energy efficiency ordinance (EEO) in October 2009. After first reading, staff will submit the EEO to the CEC for approval. After CEC approval, which may take up to three months, staff will bring it back to Council for second reading and adoption. Both ordinances will also have to be filed with the Building Standards Commission prior to taking effect. The anticipated effective date of the GBO is November 2009, and the EEO is February 2010.

With regard to the Policy and Regulatory Amendments component, staff will bring updates to AQIP Guidelines to Council in October 2009, followed by a report on possible zoning standards and design guidelines in November 2009 based upon outcomes of the CVRP. Information on the more comprehensive Community Site Design Program, based on the pending NECSC grant work (if funded), would be presented in September 2010.

MEASURE #5 – SOLAR & ENERGY EFFICIENCY CONVERSION PROGRAM

Overview

In Chula Vista, there are an estimated 50,000 residential and commercial units that were built prior to statewide minimum energy efficiency standards. The "Solar & Energy Efficiency Conversion" program (now called the Home Upgrade, Carbon Downgrade program) is intended to facilitate widespread installation of energy efficiency and renewable energy upgrades by helping the average resident and small business overcome common institutional barriers, upfront capital costs, complicated application processes and time constraints. The program's primary components include (1) Identifying the energy and water upgrades that help reduce ratepayers monthly costs, (2) Executing a competitive bid process that identifies participating contractors and establishes maximum prices and minimum warranty and service standards, (3) Aggregating participants geographically to harness their collective purchasing authority and maximize the potential for installation efficiency and savings, (4) Securing the best available bonding mechanisms and establishing voluntary special assessment districts to provide participants with a financing option to fund their improvements, (5) Linking local vocational job training in energy and water conservation with focused business recruitment, and (7) Updating municipal codes to encourage renewable energy and conservation product installations and to remove institutional barriers.

Status

The Conservation and Environmental Services Department has further developed the community energy retrofit program, entitled the *Home Upgrade*, *Carbon Downgrade* program. The City has allocated \$900,000 of its federal Energy Efficiency & Conservation Block Grants (EECBG) to help launch the program and fund initial home performance improvements. Specifically, the program will use EECBG funds to sponsor free home performance assessments and leverage existing Utility-sponsored incentives to further lower the purchase price of identified energy efficient and renewable energy retrofit opportunities. In addition, an "EECBG Revolving Loan" (\$390,000 of the \$900,000) will be made available to program participants who wish to finance the total cost of product purchases and installation (i.e. have no up-front costs) and repay the loan through their monthly energy cost savings. Finally, program funds will help establish a local green job education and

training curriculum in association with community college and high school districts. This training program will also be linked to apprenticeship and career opportunities with support from the National Electrical Contractors Association and the International Brotherhood of Electrical Workers.

The EECBG funds for the Home Upgrade, Carbon Downgrade program will be supplemented and leveraged with \$20 million in private, property-secured financing which program participants can also access to fund building retrofit projects. Property-secured financing, commonly called AB811 financing, is emerging as a novel tool for local governments to facilitate the installation of water conservation, energy efficiency, and renewable energy upgrades in the community, and allows homeowners to finance carbonsaving improvements through a voluntary tax assessment on their property. The new assessments are offset by the resulting utility savings. Staff is working with California FIRST and other jurisdictions to establish a bond option to fund the upfront capital costs of the home and business retrofit program. California FIRST was established by the California Statewide Communities Development Authority (CSCDA) which was created originally by the League of California Cities and California State Association of Counties and has funded billions of dollars in local infrastructure projects. California FIRST would provide the City with AB811-type financing to utilize through the Home Upgrade, Carbon Downgrade program. Over the next few months, California FIRST will finalize its programmatic and financing criteria and City staff has volunteered Chula Vista as the first participating city in the San Diego region. City staff is working with California FIRST partners and other regional partners to allow Chula Vista to start its property-secured financing program this winter. The California FIRST program and EECBG funds would provide critical funding to initiate the Home Upgrade, Carbon Downgrade program and ultimately complement the City's Measure 5 program bond that City Council has previously targeted for June 2010.

The City has begun to identify an additional round of energy efficiency and renewable energy retrofit opportunities at municipal buildings and facilities. The new retrofit opportunities, which would be implemented over the next 3 years, include:

- 1. Municipal Solar Installations Currently, 75 kW of solar PV are installed at the Civic Center Complex (30 kW), Police Headquarters (35 kW), Nature Center (6 kW), and Household Hazardous Waste Facility (4 kW) providing approximately 2% of municipal energy demand. As outlined in the Chula Vista Municipal Building Energy Efficiency Policy, the City's overall goal is to provide 20% or more of the total energy demand for City-owned facilities with renewable energy. Staff has released a RFP for expanding municipal on-site renewable energy generation to meet this minimum 20% target. The EECBG funding that arrives in October will allow the City to substantially complete the 20% goal near the end of this calendar year.
- 2. Parkway Boiler & Solar Hot Water System The project would install a new high-efficiency, condensing boiler and new solar hot water panels at the Parkway Recreation Center to provide domestic hot water and heat the swimming pool. Because the Center's current hot water equipment is at the end of its lifespan, the energy efficiency retrofit project would also help to defray future scheduled replacement costs. Coupling a new solar hot water system with the new boiler creates an opportunity to maximize the building's hot water efficiency and minimize the

- entire system's payback period. SDG&E's On-Bill Financing or the CEC Loan program will allow the City to complete this program within the next 6 months.
- 3. *Municipal Facility Lighting Retrofits* (Phase 2) The project would make energy efficiency upgrades to exterior and interior lighting fixtures and control systems at 54 municipal parks and buildings including Civic Center Library, Otay Recreation Center and Loma Verde Recreation Center. The project would also upgrade the street lighting along the 3rd Avenue business district. The higher efficiency light bulbs typically have a longer lifespan than convention bulbs further increasing future municipal savings. SDG&E On-Bill Financing or the CEC Loan program will allow the City to complete this program within the next 6 months.
- 4. Municipal Heating & Air Conditioning Retrofits (Phase 2) The project would make energy efficiency upgrades to the heating and air conditioning systems at the South Chula Vista Library and Public Works Corp Yard. Specifically, the retrofitted systems would include new air handler economizers, centrifugal compressors, and advanced digital control systems. Because heating and cooling typically represents 40–50% of building energy use during the daytime, efficiency improvements directly reduce peak energy loads. SDG&E On-Bill Financing or the CEC Loan program will allow the City to complete this program within the next 3 years.
- 5. *Illuminated Street Name Signs* The City currently operates approximately 700 street name signs illuminated with incandescent bulbs. The project would replace these signs with highly-reflective aluminum versions to reduce municipal energy demand and consumption. It would also eliminate current maintenance costs and staff time associated with replacing expended or broken bulbs and damaged signs. SDG&E On-Bill Financing or the CEC Loan program will allow the City to complete this program within the next 3 years.
- 6. Energy Efficient Streetlights Replacement The City currently operates and maintains over 9,000 streetlights which account for about 36% of annual municipal electricity use. The project would replace the light fixtures with energy efficient technologies, while being mindful of public safety concerns regarding light quality and coverage. The streetlight replacement project represents one of the City's best opportunities to increase municipal energy efficiency and generate over \$440,000 in potential annual savings at current electricity rates. SDG&E On-Bill Financing or the CEC Loan program will allow the City to complete this program within the next 3 years.

Next Steps

City staff will finalize the program logistics and funding for the *Home Upgrade, Carbon Downgrade* program. An RFP will be released in October 2009 to select a third-party program administrator and private financing source. It is expected that the program will officially launch in January 2010 (after EECBG funds are received) and facilitate at least 2,000 home performance retrofits over the first 3-year period. The goal is to phase into approximately 2,000 energy efficiency retrofits per year and provide the opportunity to update all 50,000 Chula Vista homes built prior to 1980 by 2020 per the California Public Utilities Commission policy. The project would also provide similar program benefits for newer homes to install solar and targeted energy efficiency upgrades.

For energy efficiency improvements at municipal facilities, staff will finalize the engineering specifications for each retrofit project and release RFPs to solicit contractor price quotes. Staff expects to select a contractor(s) in September 2009 for the municipal solar project, and plans to begin installing the photovoltaic panels in January 2010. The suite of retrofit projects will help to dramatically lower operational energy demand, monthly utility costs, and carbon emissions.

MEASURE #6 – SMART GROWTH AROUND TROLLEY STATIONS

Overview

The Measure #6's implementation plan consists of four components whose status is presented in the following section. The combined intent of these efforts is to accomplish the remaining planning groundwork necessary to support realization of the smart growth development densities and intensities envisioned in both the General Plan and the Urban Core Specific Plan (UCSP) for the areas surrounding the E St., H St., and Palomar St. trolley stations.

Status

Urban Core Specific Plan Implementation

This implementation plan component consists of two initiatives: the completion of a coordinated site development program for the area surrounding the E St. trolley station, and the completion of a visual simulation model with SANDAG depicting what development intensification of the area would look like.

The visual simulation for redevelopment of E St. trolley station area was completed under the SANDAG grant in August 2008, and is available for viewing on both our City website and the SANDAG website. Regarding the E St. TFA site development program, as reported in the last update, the City/RDA's efforts under an ENA (Exclusive Negotiation Agreement) with Galaxy Commercial Holding, LLC did not reach fruition and were ended on November 8, 2008. In February 2009, Planning and Redevelopment staff submitted a proposal for \$150,000 under SANDAG's Smart Growth Improvements Program to conduct a 5-day ULI Advisory Services Program, establish a set of site development program requirements, and prepare an RFP to solicit competitive site design proposals based on the program requirements. In March 2009, the City was informed the grant proposal was not approved; however, staff have recently partnered with the local San Diego Chapter of the Urban Land Institute (ULI) to conduct a ULI Technical Advisory Panel (TAP) program for the site in September/October 2009. The TAP will assist the City/Agency in identifying a set of feasible site development parameters considering current market realities.

H Street Corridor Study

This implementation plan component consists of three initiatives: the Urban Land Institute program, potential General Plan and/or UCSP amendments, and completion of a 3-D visual simulation model with SANDAG of what a redeveloped corridor might look like.

Funding and pursuit of an Urban Land Institute (ULI) Advisory Services Program for the corridor remains on hold per Council/CVRC direction in October 2008. Subsequent to

completing work on the E St. TFA, staff will return with a revised proposal for accomplishing the H Street Study subject to future funding availability.

A 3-D visual simulation of the Corridor was completed in June 2009 by SANDAG and their consultant per the approved grant. Although originally projected for completion in November/December 2008, staff agreed to a request by SANDAG to switch scheduling slots with another jurisdiction. Change in the schedule was not problematic considering the postponement of the above ULI work. Staff is awaiting SANDAG's formal publication of the simulation before releasing it on the City's website.

Southwest Specific Plan(s)

Staff recently completed a series of Design Workshops covering the following three areas: Palomar Gateway/West Fairfield, Main Street, and South Third Ave./South Broadway. The respective workshops were held July 11, 25, and August 1, 2009. Staff is currently preparing a summary report on the workshops' outcomes and will forward the report and an accompanying Information Memorandum to Council in September 2009.

In April 2009, the City was informed of our successful application and grant award of \$400,000 under SANDAG's Smart Growth Improvement Program to prepare a Specific Plan and related EIR for the Palomar Gateway area. Staff is currently working with SANDAG in preparation of related grant agreements and a more detailed work program and anticipates bringing the agreement, work program, and a related budget appropriations item to the City Council in September 2009.

Other Related Regional Efforts

This implementation plan component consists of two initiatives: the I-5 Corridor Study with SANDAG and Caltrans, and funding to accomplish grade separation of the trolley line at E and H Streets.

The City received notification from Caltrans in early January 2009 of Federal Highway Administration authorization to proceed with the Study. SANDAG and their consultant initiated work in April 2009 and anticipate submitting final documents by December 2010. Most recently, a project team meeting was held in July 2009 to review and narrow proposed alternatives to be studied.

Regarding trolley grade separation funding, staff will continue to work with SANDAG and others to identify and seek grant funding, including participation in the CPUC's ongoing grant programs.

Next Steps

The City will continue to seek additional funding assistance to implement the planning efforts for the E St. TFA properties. As part of those planning efforts, staff will continue to evaluate whether any changes to UCSP zoning standards are warranted to promote development of the E St. TFA.

Staff will continue to await further direction from the City Manager/Council regarding commencing the H Street Corridor Study. With regard to Southwest Specific Planning, staff will forward a summary of outcomes from the three Design Workshops to Council in

September 2009, and currently anticipates bringing a contract accepting the SANDAG grant, along with a work program for the Palomar Gateway Specific Plan and EIR, to Council in September 2009. Beginning in August of 2009, staff will begin scheduling a series of periodic briefings and public outreach meetings as various project milestones of the I-5 Corridor Study are reached. Staff will continue to seek additional funding for the E and H Street trolley grade separations.

MEASURE #7 – TURF LAWN CONVERSION PROGRAM

Overview

Because water movement and treatment requires a large amount of energy and subsequently is a major contributor to greenhouse gas emissions, Measure #7 is intended to help residents and businesses replace turf lawn areas with "xeriscape" or "WaterSmart" landscaping. These landscape types are diverse, colorful, and attractive incorporating low maintenance and water-wise design features. Specifically, the program's components include (1) continuation and expansion of the NatureScape program to promote water conserving and nature-friendly landscaping, (2) coupling of residential and business turf lawn replacement with the solar conversion aggregation block process (Measure #5), (3) converting select municipal facilities to low water use plantings and irrigation, and (4) updating various municipal landscape regulations and guidelines to comply with new state requirements and further promote outdoor water use efficiency.

Status

The Conservation and Environmental Services Department continues to implement its community-based NatureScape program which promotes nature-friendly landscaping by educating residents and businesses through free on-site assessments of their properties to evaluate wildlife-friendly and water-conserving features. City staff also educates participants about possible water-saving improvements and available incentives and rebates, when applicable. Properties which successfully meet the program's requirements are certified through the National Wildlife Federation's "Backyard Wildlife Habitat" program and receive an aluminum yard sign and certificate. To date, staff has performed on-site assessments for property owners and established approximately 200 NatureScape yards through the program's current limited funding source.

In coordination with Otay Water District and Sweetwater Authority, staff has begun drafting new outdoor water conservation guidelines in response to the revised Model Landscape Ordinance from the California Department of Water Resources (DWR). The Model Landscape Ordinance outlines new water-conserving landscape design criteria which local governments will be required to adopt by January 1, 2010. The ordinance would generally apply to landscaping for all new developments with total project landscape areas equal to or greater than 2,500 ft² and to re-landscaping of some existing properties (certain property types are exempt), and would base design thresholds on a maximum water allowance.

Both the community and municipal turf conversion programs aim to replace turf lawn areas with water-saving plants and irrigation systems. Besides reducing carbon emissions through reduced water consumption, the re-landscaped areas would help lower monthly utility costs and landscape maintenance costs. Currently, there is no available funding for

either turf conversion program, so implementation has been limited. However, staff has worked to reduce outdoor water use through low-cost upgrades to landscape irrigation systems. In the community, the Conservation & Environmental Services Department is distributing over 360 water-saving hose spray nozzles to residents participating in the NatureScape program. At municipal facilities, staff has installed 1,500 rotating spray nozzles at municipal parks which decrease water consumption by at least 20% compared to conventional pop-up spray heads.

Next Steps

City staff will continue, as funding permits, to enroll property owners in the Chula Vista NatureScape program and certify their yards and gardens through the National Wildlife Federation. Staff will also present to City Council updated outdoor water conservation guidelines for review and consideration in November 2009. The updated regulations, which will become effective on January 1st, will strongly emphasize additional outdoor water savings by further minimizing turf lawn areas, using water-wise plant types, and installing weather-based and low-water irrigation systems. Additionally, a turf conversion program will be incorporated into the launch of the *Home Upgrade*, *Carbon Downgrade* program in January 2010.

Staff would also propose working with the Otay Water District and the City's master developers to develop a draft ordinance for Council's review that requires residential landscape standards that incorporate a combination of WaterSmart and artificial turf design options. City and Water Agency staff believes that the combination of an updated ordinance that reflects local water supply concerns by discouraging the use of water-thirsty turf and promoting the aesthetic and operational benefits of WaterSmart landscapes could help stimulate local demand by developers and consumers.

IMPLEMENTATION FINANCING

Because staff has already secured almost \$400,000 in funds for initial implementation, the new measures' full implementation costs (revised amount) are now estimated at \$2,407,500 and \$1,990,000 in one-time and annual costs, respectively (Table 1). In the Council-approved implementation plans, staff outlined various financing options to support full implementation of the new climate protection measures. Over the past 12 months, staff has pursued these options and worked with the Mayor's Office and the Energy Sub-committee to more precisely outline the regulatory process and timeline required to establish the resource and implement the necessary next steps.

SDG&E Local Government Partnership

Since 2006 Chula Vista and San Diego Gas & Electric (SDG&E) have been jointly implementing programs to reduce energy consumption at municipal facilities and in the community through their Local Government Partnership. The funding is provided through a California Public Utilities Commission-sponsored "Public Goods Charge", which is a monthly utility bill surcharge on energy consumed by every customer in SDG&E's territory.

Table 1: Revised implementation cost estimates for the Council-approved climate measures

CCWG MEASURE	POLICY/PROGRAM	PROGRAM STRATEGY	ONE-TIM	E COSTS	ANNUAL COSTS
#			Received^	Needed	
Admin.	Emissions Tracking & Reporting	Track progress in reducing carbon emissions through ICLEI and California Climate Action Registry program participation			\$95,000
1	100% Clean Vehicle Replacement Policy for City Fleet	Replace vehicles through the purchase or lease of alternative fuel and hybrid vehicles	\$200,000	\$0	\$160,000
2	100% Clean Vehicle Replacement Policy for City- Contracted Fleet Services	Work with current and future vendors to include a "Clean Vehicle" replacement policy into the bid and contracting process			
3	Business Energy Assessments	Through an ordinance addition, encourage businesses to participate in a no cost assessment as part of the business licensing process			\$325,000
4	Green Building Standard	Through a building code revision, require new and renovated buildings to increase their energy efficiency and meet statewide green building standards	\$77,500	\$157,500	\$650,000
5	Solar & Energy Efficiency Conversion*	Provide a cost-effectve, streamlined mechanism for property owners to implement solar and energy efficiency upgrades and create a municipal code requiring pre-wiring for solar electric systems	\$75,000	\$0	\$350,000
6	Smart Growth Around Trolley Stations**	Implement the 'smart growth' design principles outlined in municipal planning documents	\$0	\$620,000	
7	Outdoor Water Conservation***	Provide a cost effective, streamlined mechanism for installing water saving plants at private/public sites and create new municipal landscape regulations	\$30,000	\$1,630,000	\$410,000
		TOTAL	\$382,500	\$2,407,500	\$1,990,000

^{*} In addition to annual costs presented, implementation of measure #5 would require issuance of a public bond, paid back by the property-owners receiving the services, to cover upfront capital costs for solar and energy efficiency upgrades

As part of its 2009-2011 Energy Efficiency Program Portfolio (EEPP), San Diego Gas & Electric has included \$4.6 million (3-year total) to continue the Chula Vista/SDG&E Partnership. The EEPP is reviewed and ultimately approved by the California Public Utilities Commission which has notified SDG&E that there will be delays in approving the new EEPP. As a result, the new Chula Vista/SDG&E Partnership's funding will most likely be delayed until January 2010. In the meantime, SDG&E is providing \$91,968 in monthly "bridge funding" to the City until the new funding is approved.

The 2009-2011 Chula Vista/SDG&E Partnership funds will allow continued partial implementation of Measures #3, 4 and 5. While the Partnership is providing critical current funding for these measures, there are restrictions on how the funds are used (such as no

^{**} The City has already secured approximately \$2 million for related regional smart growth efforts such as the I-5 Corridor Study

^{***} One-time costs for measure #7 include \$1,500,000 for Municipal Facilities Turf Conversion CIP

[^] The City has funded some one-time costs through grants/other external sources and by redirecting existing staff time to implement measures.

capital improvement expenditures) and there is no guarantee of future funding availability making long-term program implementation unreliable.

Energy Franchise Fees

Currently, the City collects a franchise fee of 1.25% and 2.00% of citywide electricity and natural gas sales, respectively, regardless of energy provider. An increase of 1% in both electricity (adjusted rate = 2.25%) and natural gas (adjusted rate = 3.00%) fees would generate approximately \$2.2 million in additional revenue and meet 100% of the ongoing funding needs for climate protection measures implementation. For reference, the City of San Diego's rate is currently set at 6.88% for electricity sales and 2.03% for natural gas sales and includes a surcharge dedicated to funding utility line under-grounding projects. Because franchise fees are based on each individual ratepayer's consumption level, it also helps promote energy conservation in the community by rewarding ratepayers who consume less energy with lower fee amounts. Finally, the new revenue generated will likely increase in the future as energy prices rise due to inflation and other market forces.

Staff presented the initial concept of a franchise fee surcharge to SDG&E in 2007 and a formal request in 2008 with the concept that the resource would fund the City's climate protection program and any remaining annual funds would be dedicated to local undergrounding projects. As part of the formal request, staff presented the Franchise Fee Increase Analysis (Appendix A) to SDG&E which was also previously presented to City Council. The analysis estimates the amount of revenue that would be available to invest in energy efficiency and climate change mitigation for each incremental increase in the franchise fee surcharge and its potential corresponding impact to ratepayers. Staff and Council have continued to work through SDG&E's issues as part of a regularly scheduled communication regarding franchise issues. Staff believes that the franchise fee increase is one of the best opportunities available currently to secure a long-term funding source to invest in the new climate measures' implementation which complement the City broader sustainability goals and other statewide climate change and energy initiatives. Staff anticipates completing the negotiation process with SDG&E in the next few months and presenting a revised franchise fee rate to City Council for review and consideration in January 2010. Once the surcharge is defined and reviewed by Council, the proposed surcharge may need to be vetted through a Proposition 218 review for further public review and consideration.

Local Fee Authority

A local fee authority has been granted in the past by the State legislature to enable local governments to fund environmental programs and services. For example, Chula Vista received fee authority under Assembly Bill 939 (Integrated Waste Management Act of 1989) to fund the development and implementation of municipal solid waste, recycling and household hazardous waste programs to meet state-mandated landfill diversion goals and local reporting requirements. Similar to the energy franchise fee, a local fee authority would fund the costs for conducting GHG inventories, reporting to the Climate Registry (and eventually the California Air Resources Board), and provide direct service programs to residents and business. Staff has designed the investment of this potential new resource in order to promote participation in conservation efforts by rewarding residents and businesses who consume less resources (and have lower carbon emissions) with actions that lower their monthly operating costs.

The City has continued discussions with staff members from various State representatives' offices to assess interest in supporting fee authority legislation. Generally, most state representatives' staff members were supportive of local greenhouse gas emissions reduction efforts and recognized the need for a reliable, long-term funding source. Staff will be working directly with Chula Vista's State representatives to draft the specific bill language over the next 3 months. Dependent on the legislation, a local fee authority may also need to be vetted through a Proposition 218 review process for further public review and consideration.

Building Permit Fees

Development fees could be increased to cover the additional costs associated with implementing a citywide, mandatory green building standard (Measure #4). The extra costs are attributed to the need for enhanced staff training on energy efficiency, renewable energy and sustainable building technologies, and for expanded permitting and inspection services. Recent discussions with the California Energy Commission, the San Diego Electrical Training Center and statewide contractors suggest that municipal permit review and inspection is the most critical missing component in ensuring that energy efficiency standards are properly implemented and that the consumer receives the benefit of their investment. It is estimated that approximately 70% of energy efficiency products that are not inspected by the City and/or a third-party process are not properly installed and do not deliver their full benefit.

The Finance Department is currently finalizing a Master Fee Study assessing the revenue needed to fully fund the City's broader development-related services. As part of this study, the City will be able to specifically assess the additional costs from a mandatory green building program and revise the fee schedule as needed. It should be noted that permit fees are directly linked to development levels and may not provide a consistent, long-term funding source for the program. Staff anticipates presenting the Master Fee Study's results to City Council in December 2009 for review and consideration.

Bonds

A public bond issued by the City and secured through a voluntary AB811 property tax, franchise fees, or local fee authority surcharges could quickly provide large, upfront capital improvement funds required to implement some of the seven measures. The bonds could have two specific applications: (1) provide capital funds for energy efficiency and solar retrofits for participating residential and small business facilities (part of Measure #5 or the *Home Upgrade, Carbon Downgrade* program) and (2) provide funds for public purpose climate-related programs such as municipal renewable energy installations, alternative fuel fleet improvements, public alternative fueling stations, and turf conversions.

Under application #1, participating property owners would elect to be part of a special assessment district and their increased property fees would be applied to the bond's debt service (i.e. property-secured financing). As previously mentioned, staff is working with the California Statewide Communities Development Authority (CSCDA) who is developing a statewide bond issuance which Chula Vista and other member agencies could utilize. Staff is also exploring the use of private equity financing to initially launch the property-secured home performance retrofit program, if CSCDA funding is delayed.

Under application #2, all Chula Vista property owners would vote in a general election whether to authorize a municipal bond issuance. The general municipal bond would allow the City to make significant investments in public purpose projects which would reduce carbon emissions. City staff has investigated the process and nuances of bond issuances for climate protection measures implementation and has met with representatives from private financing institutions and consultant groups on how to structure public bonds. For municipal facility retrofits, the Finance Department and Conservation & Environmental Services Department are currently working with CleanTECH San Diego in obtaining authorization from the Internal Revenue Service to issue Certified Renewable Energy Bonds (CREBs) in the future. CREBs are tax credit bonds which can be used to fund local governments' renewable energy projects such as solar and wind. Because tax credits are a significant benefit to bondholders, the interest rates typically result in lower financing costs The bond's debt service is repaid over a 15-year period through the renewable energy projects' resulting energy cost savings. Staff is also investigating the use of Qualified Energy Conservation Bonds (QECBs) which finance energy efficiency improvements at municipal facilities and possibly in the community. Similar to CREBs, QECBs are low-interest tax credit bonds which local governments can issue and repay through the resulting energy cost savings. As outlined in the Council-approved implementation plans, staff has tentatively scheduled a public bond vote for June 2010.

Grants

City staff have been tracking and soliciting potential grant funding from a variety of government agencies. In May 2009 (two months before the deadline), staff submitted its proposed project list for the City's federal Energy Efficiency & Conservation Block Grant allocation (EECBG) totaling \$1,974,300. The EECBG funds, which are expected to be received in September 2009, will be used to install a new biodiesel fuel tank at the Public Works Corp Yard (Measure #1), expand on-site municipal solar power generation (Measure #5), and provide incentives and a community revolving loan program for home performance retrofits (Measures #5 and #7).

On July 21, 2009 City Council authorized the submittal of an application to the US Environmental Protection Agency in response to its Climate Showcase Communities grant solicitation. The proposed project would focus on retrofitting at least two residential areas to serve as a living showcase for a "Carbon-Light Neighborhood." In partnership with community groups, labor organizations, education districts, and water and energy utilities, Chula Vista would select approximately 50 existing homes to upgrade with energy efficiency, water conservation, and renewable energy improvements. These building upgrades will be further complemented by neighborhood infrastructure improvements such as the installation of highly-efficient street lighting technologies and the planting of shade trees. The Carbon-Light Neighborhoods would provide a powerful showcase and marketing tool that will promote the launch of the citywide *Home Upgrade*, *Carbon Downgrade* program.

At the State and regional level, the City will continue to access the low interest loan program from the California Energy Commission to facilitate the installation of energy efficient and renewable energy technologies at municipal facilities. The loan program provides the capital needed for the energy technology improvements and the resulting energy cost savings are used to repay the debt service. Recently, the CEC lowered its loan

program's interest rate to 1% improving its cost competitiveness to other financing options. The City also plans to take advantage of the CPUC-approved "On Bill Financing Program" provided through SDG&E. The program offers no interest financing for projects with a value of less than \$250,000 that produce cost effective energy savings and can be recovered in ten years or less.

The federal and state grant opportunities outlined above could provide partial funding for Measures #1, 3, 4, 5, and 7. While these resources would help implement these measures, the funds would be most applicable for one-time costs and capital improvement expenditures due to their short-term nature. Staff will continue to package these programs with rebates and bulk purchasing to produce the cost effective projects, prompt General Fund savings, and maximum carbon equivalent reductions.

City staff will continue to implement the Council-approved climate protection measures and to further the City's progress in creating tangible carbon reductions. One of the greatest challenges to facilitating further municipal and community-wide carbon reductions will be to establish a secure long-term funding source to ensure that the progress and momentum regained over the past two years continues until the City's environmental and economic sustainability goals are achieved.

\$1,116,281.00 \$1,674,421.50 \$2,232,562.00 \$2,790,702.50 \$3,348,843.00

\$459,200.74

\$3,906,983.50

\$1,607,202.59

\$2,628,321.04

\$1,148,001.85

\$918,401.48

\$1,314,160.52

\$23.48

\$43.58

\$18.85

\$38.95

\$3.56 \$4.42 \$5.28

\$7.28 \$8.14 \$8.99 \$9.85

\$1.92

\$3.11 \$3.47 \$3.84 \$4.21

0.50% 0.75% 1.00%

\$34.33

\$2.71

\$6.42

\$20.10

\$3.72

\$1.56

(Elec - 1.10%; NG - 1.00%)

BASELINE FRANCHISE FEE

No Change**

\$657,080.26

\$1,377,602.22

\$1,971,240.78 \$2,299,780.91

\$32.73

\$52.84

\$6.13

\$48.21

\$2.66 \$3.03 \$3.40

\$4.58

1.25% 1.50%

INCREASE AMOUNTS (for both Elec. & NG)

FRANCHISE FEE

1.75%

\$2.29

\$37.36

\$57.46

\$10.71

\$41.99

\$62.09

\$7.85

\$3.77

\$5.32

\$4,465,124.00

CHULA VISTA FRANCHISE FEE INCREASE ANALYSIS - DRAFT
Customer Impact Examples & Revenue Increases

Updated: December 5, 2008

		RESID (D	RESIDENTIAL (DR)	SMALL CO	MMERCIAL 4)	SMALL COMMERCIAL LARGE COMMERCIAL (ALTOU)***	E COMMERCIAL (ALTOU)***	ESTIMAT	MATED REVENUE INCREASES^	REASESA
		Amount	Amount Difference Amount Difference Amount Difference	Amount	Difference	Amount	Difference	Electricity	Natural Gas^^	TOTAL
	Monthly Baseline (kWh)	306		n/a		n/a				
ELECTRICITY	Monthly Use (kWh)	200		1,500		10,000				
	Estimated Cost*	\$78.39		\$286.76		\$1,592.65				
	Monthly Baseline (Therms)	15		n/a		n/a				
NATURAL GAS	Monthly Use (Therms)	20		20		250				
	Estimated Cost*	\$69.35		\$56.11		\$258.24				
	Estimated Total Cost	\$147.74		\$342.87		\$1,850.89	-			

**Baseline Franchise Fee values are derived from what Chula Vista customers are actually paying, not the fee rate (1.25% Elec., 2% NG) articulated in the SDG&E MOU. Chula Vista customers are currently paying the SDG&E territory-wide fee of 1.1% (Elec.) and 1% (NG) except for non-SDG&E supplied energy. Based on Summer rate schedules & includes commodity, UDC, basic services & demand charges.

**Assumes 40 kW monthly maximum demand.

Astimated City revenue increase based on 2007 energy sales - \$131,416,052 (Elec) and \$91,840.148 (NG) - which includes imputed values from retail wheeling and will likely change for 2008 due to already-approved energy rate changes.

Approximately 55% of Franchise Fee revenues from natural gas are attributable to power generating facilities (ex. South Bay Power Plant and Main Street Peaker Plant) within Chula Vista.